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MONTEREY, CALIFORNIA

THESIS

THE EFFECTS OF INCENTIVES ON RECRUITER PRODUCTIVITY

by

Luis Ortiz IV

March 2014

Thesis Co-Advisors:

Jeremy Arkes
Jesse Cunha

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THE EFFECTS OF INCENTIVES ON RECRUITER PRODUCTIVITY

Luis Ortiz IV
Lieutenant, United States Navy
B.S., Embry-Riddle Aeronautical University, 2009

Submitted in partial fulfillment of the
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**NAVAL POSTGRADUATE SCHOOL
March 2014**

Author: Luis Ortiz IV

Approved by: Jeremy Arkes, PhD
Thesis Co-Advisor

Jesse Cunha, PhD
Thesis Co-Advisor

William Gates, PhD
Dean, Graduate School of Business and Public Policy

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ABSTRACT

The objective of this research is to gain a greater understanding of how various incentives, both non-monetary and monetary, can impact recruiter productivity. Towards this end, I developed and administered a survey that was applied to most NRDs and elicited preferences for various monetary and non-monetary incentive schemes. One key result is that enlisted production recruiters tend not to value non-monetary awards, while management believes that these awards are important motivators. The other key result is that a modest bonus per high-quality contract (of \$50 or \$100), along with eliminating demand constraints, would significantly increase productivity.

Based on conservative assumptions, I find that a \$100 bonus per high-quality contract would allow for a reduction of over 600 recruiters and potentially have a 32-to-1 benefit-cost ratio. In light of potential problems of using bonuses, other results suggest that giving a half-day of liberty per HQ contract would also elicit significantly higher productivity, notably with no increase in costs.

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LIST OF ACRONYMS AND ABBREVIATIONS

AOR	area of responsibility
ASVAB	Armed Services Vocational Aptitude Battery
DEP	Delayed Entry Program
DLCPO	division leading chief petty officer
ER	enlisted recruiter
LCPO	leading chief petty officer
LPO	leading petty officer
NCR	Navy Counselor Recruiting
NRC	Navy Recruiting Command
NRD	Navy Recruiting District
NRDD	Navy Recruiting District Division
NRS	Navy recruiting station
OR	officer recruiter
PPR	production per recruiter
RIPP	recruiter incentive pay pilot
SDAP	special duty assignment pay
STEAM	standardized territory evaluation and analysis for management

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I. INTRODUCTION

The allure of accelerated advancement opportunities and the supplemental special duty assignment pay (SDAP) of \$450 per month may encourage sailors to volunteer for recruiting duty. However, these incentives lack the endurance to successively motivate recruiters. Samuelson et al.'s (2006) inverted-U productivity curve appropriately illustrates this absence of incentive resilience, indicating that recruiters achieve their peak productivity between 12 and 18 months (Samuelson, Kraus, Reese, & Moskowitz, 2006). The drop-off in productivity after their peak (with usually more than half of their tour remaining) suggests that recruiters underperform.

Along these lines, for nearly 25 years, recruiter productivity has steadily decreased. Research suggests that fluctuations in the number of recruiters, and the distribution of recruiter experience, influence this decay of productivity (Samuelson et al., 2006). Although the size of force and distribution of experience may affect productivity, Samuelson et al.'s recommendation to address decreased productivity discounts the influence of appropriate incentives on recruiter productivity.

For some recruiters, the monthly quota system offers the necessary incentive to be more productive; however, this system may encourage unsolicited recruiter behavior. For example, new research found that recruiters may purposely retain prospective recruits until the following month (Arkes and Cunha, 2014). In doing so, recruiters meet their minimum requirement early in the month, usually within the first week; thereby easing the stress of producing an implied productivity of one contract per month. This practice is commonly referred to as “sand bagging” a recruit, which refers to a recruiter deliberately underwriting contracts to save a recruit for the following month. The implications of this practice can include deterioration of Navy recruiting station (NRS) cohesion and NRS missing monthly mission goals. Furthermore, their findings suggest inadequate incentives promote mediocrity and risk forgoing quality for quantity.

Regarding recruit “sand bagging,” additional research by Arkes shows evidence that recruiters are not as productive as they could be after their first monthly contract

(Arkes, 2013). Therefore, the monthly quota system may require additional incentives to curtail this period of inefficient performance, and a self-supported monthly bonus may achieve the desired recruiter behavior.

This thesis conducts a survey to determine the importance of various incentives and to quantify the potential effectiveness of a bonus. In particular, the survey will ask participants to express their level of satisfaction with the current non-monetary incentives, and will also provide scenario-based questions to elicit recruiter preferences and potential recruiter productivity under different bonus scenarios. This will assist in determining which incentives, monetary and/or non-monetary, encourage recruiter productivity. The survey will likely identify individual-level attitudes and perceptions that affect their productivity; thereby assisting in the development of future incentive policies

II. NAVY RECRUITING

A. BACKGROUND

Since the end of conscription in 1973, successful execution of the Navy's strategy has relied upon volunteers to source its manning requirements. Today's Navy requires the enlistment of approximately 36,000 civilians annually; to meet this requirement the Navy depends upon its recruiting force within Navy Recruiting Command (NRC).

Over the past two decades, NRC has experienced a steady decrease in productivity per recruiter (PPR). To illustrate, Figure 1 shows the average FY PPR and groups the data into three categories: DOD drawdown, Sustainment, and Navy drawdown. These categories reflect DOD strategic priorities, which may have affected PPR. However, this decline may also indicate that recruiters may not be as productive as they once were.

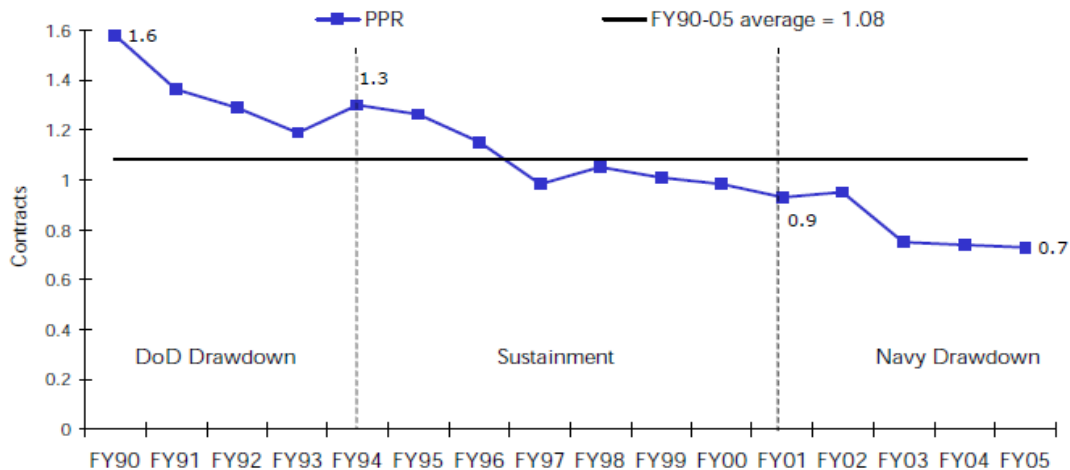


Figure 1. Official contracts per recruiter. (after Samuelson, Kraus, Reese, Moskowitz, 2006, p. 13).

Historically, NRC has maintained an average recruiting force of 3800 recruiters to complete its mission. Data provided by NRC (R. Jenkins, personal communication, February 14, 2014) illustrates the relationship between the number of recruiters and monthly PPR (see Figure 2).

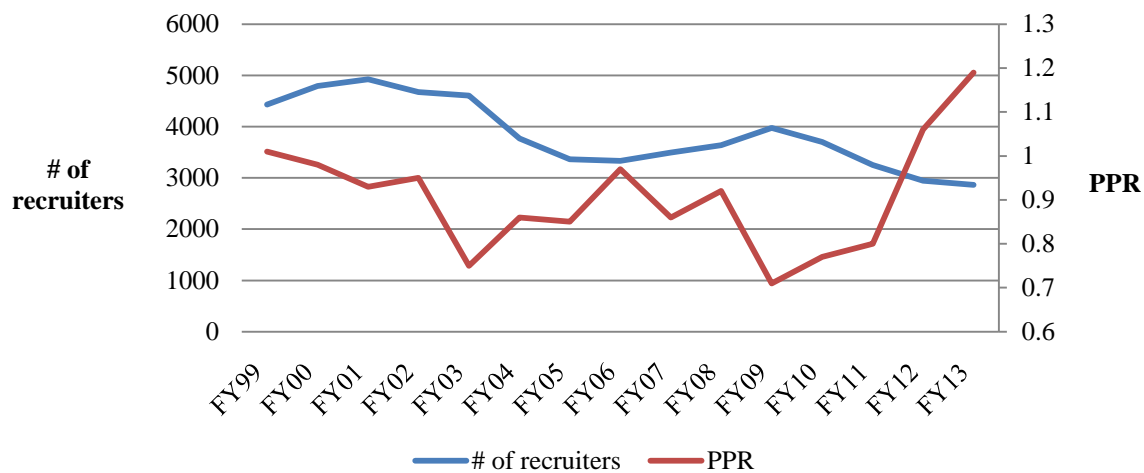


Figure 2. PPR versus number of recruiters

As seen in Figure 2, the number of recruiters versus PPR shows an inverse relationship. For example, in FY 99 through FY01 the number of recruiters increased as the average PPR decreased. Furthermore, in FY09 through FY13 the numbers of recruiters decreased as the average PPR increased. When comparing Figure 1 and Figure 2, there are slight difference in PPR (due to the data coming from different sources); however they both illustrate a similar decline in PPR.

In the next section, I will describe the infrastructure required to accomplish the mission of Navy recruiting.

B. NAVY RECRUITING COMMAND

1. Mission

According to Commander, Navy Recruiting Command:

Navy Recruiting Command is charged to seek out, source and recruit the best and brightest young men and women to sustain and maintain a cadre

of ready personnel. This state of readiness is achieved through: strong integrity-based leadership, spirited teamwork, and a commitment to excellence. Navy Recruiting Command is ready to responsibly employ its assets to provide its recruiting field all the necessary resources to deliver the highest quality Sailors to the fleet, and it has a professional and moral obligation to uphold our covenant with our recruiting force—military and civilian—and our Future Sailors. (Commander, Navy Recruiting Command [CNRC], 2013)

2. Command Structure

The structure of Navy Recruiting Command consists of the following five components:

a. Navy Recruiting Command

As the headquarters, Navy Recruiting Command (NRC) provides strategic oversight for Navy recruiting. Working hand-in-hand with the Chief of Naval Personnel (CNP), NRC receives future personnel requirements. In doing so, NRC then establishes policy guidelines and incentive programs that encourage efficient and ethical recruiting practices to achieve requirements.

b. Navy Recruiting Region

Located within NRC headquarters, in Millington, Tennessee, region commanders divide the nation into two regions, Region East and Region West. As seen in Figure 3, Region East is located to the right of the red line; the opposite is true for Region West. Each region is comprised of 13 districts, which includes the following overseas locations: Europe, Guam, Japan, Puerto Rico, and the Virgin Islands.

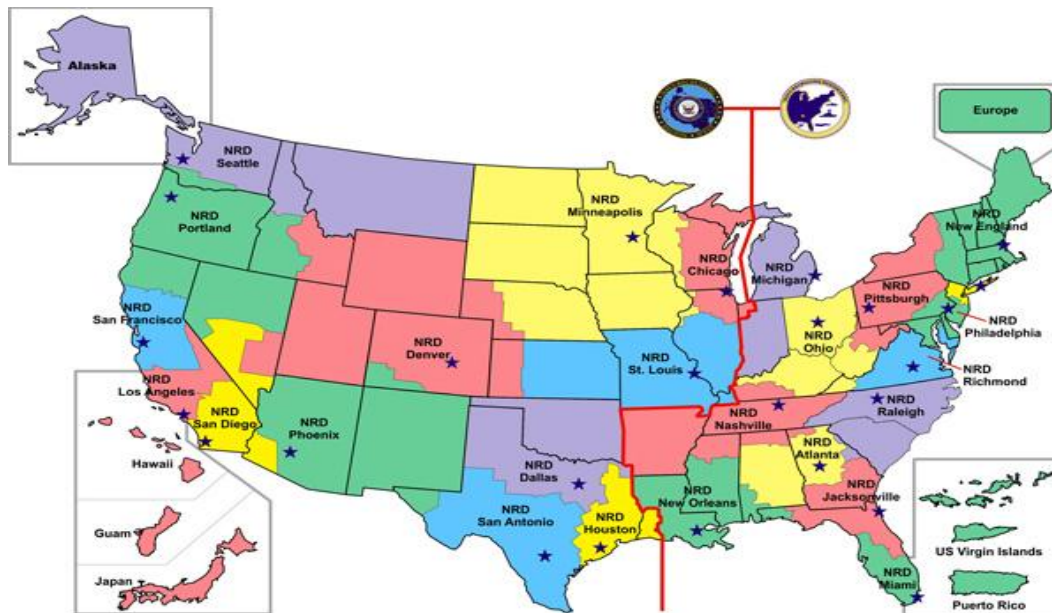


Figure 3. Regions and district map (from CNRC, 2013)

c. Navy Recruiting District

To ensure national recruiting coverage, 26 Navy recruiting districts (NRDs) are strategically placed throughout the nation (see Figure 3). As a result, NRDs are responsible to efficiently canvas their assigned area of responsibility (AOR) to ensure all eligible candidates are given an opportunity to serve.

d. Navy Recruiting District Division

Each NRD geographic AOR is further subdivided into divisions. Depending on the geographic area of a NRD, an NRD may consist of six to 10 divisions.

e. Navy Recruiting Station

Currently, 985 Navy recruiting stations (NRS) are spread out among the 26 NRDs. Ideally, an NRS should be placed in a geographic location with a high propensity for enlistment. NRS locations are identified and organized by zip code through demographic and past production data, and all zip codes within the NRD must be assigned to a NRS regardless of population density.

C. PERSONNEL

1. Canvasser Recruiters

Typically, a canvasser recruiter is a sailor returning from the fleet executing their rotational shore-duty. Additionally, these recruiters often have five to 10 years of experience in the Navy and normally volunteer for recruiting duty to advance their careers.

2. Career Recruiting Force Recruiters

Career recruiting force (CRF) recruiters are recognized as subject matter experts in the field of recruiting. In general, CRF recruiters were sailors who excelled in recruiting during their initial tour and submitted a package requesting to convert their rate to Navy counselor recruiting (NCR). By retaining successful recruiters as NCRs, NRC preserves requisite knowledge to successfully train future canvasser recruiters.

D. DAILY RECRUITER TASKS

A systematic recruiting process provides a framework in which the recruiter is to operate, and is critical to a successful tour of duty. An overview of daily recruiter activities are as follows:

1. Market Identification

If a recruiter fails to plan, they plan to fail. Identifying a market with a high propensity to enlist is the cornerstone to recruiter productivity. Once a recruiter identifies this market, they can develop a plan of action and determine the most effective mode of prospecting to penetrate the market.

2. Prospecting

Modes of prospecting include the following: phone, finding personally developed contacts, establishing center of influences (i.e., teachers, coaches, and counselors), contacting leads, and referrals. Prospecting serves as a way to arrange and conduct an interview with the prospect.

3. Screening

Normally conducted in conjunction with prospecting, the screening process allows recruiters to gather prospect information such as medical history, drug usage, criminal background, citizenship, age, height, and weight to determine their enlistment eligibility status. This process allows recruiters to quickly eliminate unqualified prospects and avoid the misuse of time.

4. Presentation of Opportunities

During a face-to-face interview with a potential applicant and their significant others or parents, recruiters answer questions regarding the Navy and present opportunities available in the Navy. Additionally, each recruiter is trained to identify the needs of each prospect, as well as a significant other's or a parent's needs, in order to have them submit an application for enlistment.

5. Processing

Once an applicant is determined to be conditionally enlistment eligible, the applicant applying for enlistment in the USN or USNR must complete the Armed Services Vocational Aptitude Battery (ASVAB) and a physical examination at the processing station by a military entrance processing station (MEPS) representative. This process requires the recruiter to prepare and submit all necessary paperwork, for each applicant, prior to scheduling the aforementioned enlistment requirements.

6. Enlistment

Once considered fully eligible for enlistment, an acceptable ASVAB score and physical examination, the applicant selects their future job and enlists into the Delayed Entry Program (DEP). Since the enlistment process is normally conducted at MEPS, the recruiter may be required to provide the new enlistee, now entitled a DEPer, transportation to return to the NRS.

7. Delayed Entry Program

Management of the DEP pool involves the recruiter preparing their DEPers for Recruit Training Command (RTC), as well as maintaining their DEPers enlistment eligibility status. Recruiters will manage DEPers for up to 12 months. Benefits of the DEP program include advancement opportunities for DEPers, prior to departing to RTC, and production of DEP referrals.

8. Shipping

Lastly, recruiters are responsible to ensure that each DEPer ships to RTC. In preparation of this evolution, recruiters must transport the DEPer to MEPS on their scheduled shipping date.

Due to the demanding environment of recruiting duty, recruiters must systematically integrate responsibilities and activities to successfully accomplish their mission. More importantly, they must understand the process and continually evaluate and improve their time management skills.

E. GOALING

Reasonable assignment of goals to each NRD, division, and NRS, is the objective of the goal allocation process. This necessitates an in-depth analysis of market and assignment of recruiters in such a way that each recruiter has the same opportunity to make goal. The recruiting regional commander issues an annual goaling letter to each NRD to establish formal accountability, by division, for goal attainment. The NRD assesses the makeup of its market and evenly distributes its goal to each division leading chief petty officer (DLCPO), who then finally distributes the goal to the each NRS leading chief petty officer (LCPO) or leading petty officer (LPO).

Standardized Territory Evaluation and Analysis for Management (STEAM) applies algorithms to national market data to assist recruiting region commanders and NRDs in assigning monthly recruiting goals. Additionally, STEAM provides an analytical process by which recruiting region commanders and NRDs can perform market research activities to assign recruiting goals (CNRC, 2011).

Each month, using STEAM information, NRC distributes a “goaling letter” to each NRD that specifies individual recruiting benchmarks based on the NRD’s market share. Upon receipt, the NRD determines the market share for each division and NRS using the measures that best identify potential recruiter productivity. STEAM allows the NRD flexibility in identifying these factors. However, market share calculations are most impacted by a combination of population and production factors. The market share for each NRS is a fraction that indicates the share of the NRD market of selected data elements (or potential market) contained in the zip codes assigned to that station. Market shares may be calculated with various weights and other combinations of data elements for comparison and to target other markets (CNRC, 2011).

F. CURRENT INCENTIVES

Although seldom discussed, receipt of recruiter special duty assignment pay (SDAP), \$450 per month, implies that the recruiter is expected to write at least one net contract per month. Once a recruiter qualifies to receive SDAP, their eligibility status is updated monthly by headquarters personnel. If a recruiter has not met monthly eligibility requirements they risk being removed from the command’s authorized SDAP manifest. Therefore, in some ways, fear of missing this requirement acts as a productivity incentive. Despite this fear, those who volunteer for recruiting duty understand that a successful tour increases their advancement opportunities.

To optimize recruiter productivity, Navy policy should contain incentives that capture desired recruiter behavior. Current policy provides a singular monetary incentive, SDAP, and several non-monetary incentives that will be discussed.

1. Special Duty Assignment Pay

According to Navy Personnel Command:

The SDAP [Special Duty Assignment Pay] program is an incentive pay ranging from \$75 to \$450 a month used to entice qualified Sailors to serve in designated billets that are considered extremely difficult or entail arduous duty. Program levels change to reflect the current environment associated with each billet and to sustain adequate manning levels. In order to qualify for SDAP, Sailors must be assigned to and working in a

valid billet on the Command Manpower Authorization Listing. This billet must be authorized by the Bureau of Naval Personnel as a special duty assignment billet. Commands holding SDAP billets are required to complete an annual recertification. (Navy Personnel Command [NPC], 2011)

2. Non-monetary Incentives

Non-monetary incentives serve to promote recruiter productivity through recognition. Receipt of certain non-monetary incentives such as the Navy commendation medal, the Navy and Marine Corps achievement medal, and a flag letter of commendation recognize the individual's effort, but more importantly, they increase the recruiter's advancement opportunities.

G. HISTORY OF RECRUITER BONUSES

Historically bonuses have not been utilized to incentivize recruiter productivity in any service. However, during the mid-2000s, the Army implemented the recruiter incentive pay (RIP) pilot program to offer bonuses for individual recruiter productivity. The program's intent was to boost the Army's percentage of high school graduates and improve its enlisted ASVAB scores (Farrell, 2008). Due to suspected fraud, the program was terminated in February 2012 and a federal investigation was initiated to determine the extent of the suspected fraud.

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III. METHODOLOGY

A. OVERVIEW

This chapter discusses my approach to answering the following questions:

- Does the current awards system adequately incentivize recruiters?
- What effects do monetary and non-monetary incentives have on recruiter productivity?
- Would a bonus per net high-quality contract increase productivity enough to pay for itself?
- What effect does liberty have on productivity?

The primary goal of this survey is to have recruiters reveal their expected productivity by answering scenario-based questions; then compare their scenario responses to their non-monetary productivity estimates. This will assist in determining which incentives optimize recruiter productivity.

B. SURVEY

I conducted an online-survey, using Lime Survey software, to elicit recruiter preferences and observe their behavior under different scenarios. The survey was administered to 20 of 26 NRDs, which represents 76.9 percent of all NRDs. Data received from NRC (R. Jenkins, personal communication, February 14, 2014) suggests the average number of recruiters, at any given time, is 3,250. Assuming recruiters are evenly distributed among NRDs, the sample size is approximately 2,500 recruiters (3,250 average number of recruiters times 76.9 volunteer percentage). A total of 794 participants completed the survey; of which 306 enlisted recruiters, the targeted population, completed the survey, a response rate of approximately 12 percent. Additionally, 488 responses were officer recruiters, LPOs, LCPOs, DLCPOs, and headquarters management, and, when aggregated with enlisted recruiters, accounts for approximately 30 percent survey response rate. The survey consists of 34 questions divided into five sections: general information, non-monetary awards, a bonus scenario, estimated productivity, and current SDAP structure. Additionally, at the end of the survey,

participants could leave comments making contributions to the research. Next, I will describe the logic used to develop each section of the survey.

1. Section I (General Information)

Asking general questions will allow me to create anonymous individual profiles and compare their perspectives on current recruiter incentives. Through these profiles, I can identify whether an incentive disconnect—the difference between perspectives on incentives that motivate recruiters—exists between recruiters and their leadership.

Section one consists of the following questions:

a. Which Category Best Describes Your Current Position?

The participants were given the following choices: enlisted recruiter (ER), officer recruiter (OR), leading petty officer (LPO), leading chief petty officer (LCPO), division leading chief petty officer (DLCPO), headquarters management (HQ), and none of the above. Based on the participant's selection, subsequent questions will be relevant to their position; thereby minimizing the survey's duration and impact on recruiter productivity.

b. Which of the Following Best Describes Your Current Recruiter Qualification?

Only those who selected ER, LPO, and LCPO on the previous question were asked about their qualification and were able to select the following as their current recruiter qualification: unqualified, basic, or advance. Since these three positions are considered to be “on-production,”—meaning those making initial contact with an applicant and assisting them through the enlistment process—their current qualification may reveal their perspective on recruiter productivity. For example, once recruiters arrive to their assigned Navy recruiting station (NRS) they are given 90 days to become “basic” recruiter qualified. Other than the 90 days given, an incentive to become basic recruiter qualified is on-production recruiters only receive their SDAP, \$450 per month, once they receive this qualification.

c. *Did You Volunteer for Recruiting Duty?*

The participant is given the option to select “yes” or “no.” This question may reveal the recruiter’s outlook on recruiting incentives. For example, if a recruiter did not volunteer for recruiting duty and has been unsuccessful in recruiting, there may be no incentives that motivate them to maximize their productivity.

d. *Were You Given a Choice About Where You Would be Stationed?*

Recruiting duty offers a unique opportunity for sailors to return to their hometown and recruit the next generation of sailors by sharing their experiences. The participant is given the option to select “yes” or “no.” This question may reveal a non-monetary incentive, hometown recruiting, which motivates recruiter productivity.

e. *How Many Months Have You Been on Recruiting Duty?*

This question provides an opportunity to observe whether recruiter qualifications and productivity correlated. For example, are basic recruiters less productive than advanced recruiters, or vice versa?

f. *What is Your Best Guess for How Many Contracts You Have Written in the Last [3, 6, 12] Months?*

By asking this question, recruiters provide a baseline of their productivity. At this point recruiters do not have an incentive to game the survey.

g. *Assuming Your Production was Limited by Navy Recruiting Command Quality Standards, How Many Contracts Could You Have Written in the Last [3,6,12] if You Were NOT Restricted in How Many Contracts You Could Have Written?*

The participant does not see this question unless the previous question’s answer is greater than zero contracts. The purpose of this question is to address the potentially adverse effect of limiting a recruiter’s production. This limitation may act as a disincentive to productivity.

h. Approximately, What Percentage of Your Contracts Have Been High-Quality (AFQT \geq 50)?

This question indicates the recruiter's ability to write high-quality contracts. For example, if the recruiter indicates that 89 percent of their contracts have been high-quality, then it is safe to assume that the recruiter has the ability to write these contracts despite the current incentive. Therefore, when given a bonus scenario, which requires the recruiter to write a high-quality contract, the incentive will remain attainable.

i. Are You a Career Recruiter?

This question allows me to observe whether incentives motivate the two types of recruiters, canvasser and career, differently.

2. Section II (Non-monetary Awards)

This section provides survey participants an opportunity to express their opinion on how nonmonetary incentives affect recruiter productivity. Although incentives may vary among NRDs, the following categories capture individual recruiter incentives, described below, used among all NRDs: gold wreath, other individual-level awards, and liberty. By asking the participant to rank each category, I will be able to determine which nonmonetary incentive has the largest impact on recruiter productivity.

a. Gold Wreath

Upon successful completion of Navy Orientation Recruiting Unit (NORU), recruiters are awarded a recruiting badge that is prominently displayed on the recruiter's uniform. This badge is unique and is only authorized to be worn while on recruiting duty. Moreover, the aesthetics of the recruiter badge can be enhanced through recruiter productivity. To illustrate, an enlisted recruiter will receive gold wreath awards once they have been onboard at least 90 days and net any combination of four new contracts/reserve gains within a consecutive, non-overlapping, three month period or less (CNRC, 2013). Many recruiters recognize the initial gold wreath as a recruiting milestone, which indicates the recruiter's professional knowledge and competency, and subsequent awarded gold wreaths further support this recognition.

b. Other Individual Awards

The NRC *Awards Manual*, COMNAVCRUITCOM 1650.1B Chapter 5, provides NRD leadership guidance in managing and submitting recruiter awards. Perhaps due to the interpretation of the manual, presentation of awards vary among NRDs. As a result, we grouped enlisted recruiter awards, not including gold wreaths, into other individual awards (OIA). These awards include the following: Navy commendation medal, Navy and Marine Corps achievement medal, recruiter of the year, recruiter of the quarter, recruiter of the month, heavy-hitter, and the six-shooter award. The purpose of each award is to promote recruiter productivity through recognition; however, when compared to other OIA awards, two awards distinctively activate increased productivity, the Navy Unlike other OIA, these awards directly impact the recruiter's future advancement opportunities.

c. Liberty

Time off tends to be the most effective means of boosting recruiter productivity. Frontline leadership such as LPOs, LCPOs, and DLCPOs, when able, take advantage of this favorable incentive; however, they have limited authorization. For example, frontline leadership is only authorized to grant a maximum of 24 hours liberty, which means that leadership is unable to grant liberty on Mondays or Fridays. As a result, this limitation does not provide leadership sufficient autonomy to maximize the benefits of liberty, such as high morale and job satisfaction.

Section II consists of the following questions:

d. How Often do the Following Awards Motivate Recruiters to Obtain More Than One Contract Per Month?

This question will reveal which nonmonetary award(s) motivates recruiters to write more than one high-quality contract per month. Using a Likert-scale, each participant can express their level of agreement by selecting the following: strongly disagree, disagree, neutral, agree, or strongly agree. If the participant selects "strongly disagree," their opinion to the corresponding award indicates that the award has little

effect on their productivity. Conversely, if they select “strongly agree,” the corresponding award significantly contributes to their motivation in attaining an additional high-quality contract.

e. How Often do The Following Awards Cause Recruiters to Shift Their Efforts From Recruiting High-Quality (AFQT \geq 50) to Low-Quality (AFQT<50) Recruits?

This question seeks to reveal whether recruiters shift their efforts based on the numbers of days left in the month.

3. Section III (Bonus Scenario)

Recruiters may have a tendency to exaggerate their productivity if simply asked how productive they would be in certain situations. Therefore, to foster an authentic response, recruiters faced the potential to lose money as a means to accurately indicate productivity.

In this section, recruiters are placed into a scenario in which they are given a one-time option to select one of the following SDAP options:

- Plan A—receive the current recruiter SDAP of \$450 per month; or
- Plan B—receive an SDAP pay of \$250 a month plus a certain bonus per net high-quality contract.

The purpose of this scenario is to reveal estimated output and the influence of monetary incentives on recruiter productivity. Note, SDAP reduction to \$250 would not be necessary if a bonus were to be implemented.

The section’s initial question asks the recruiter to make a one-time selection of their preferred SDAP option, Plan A or Plan B, if the bonus amount were \$50 per net high-quality contract. If the recruiter selects Plan B, I can infer that the recruiter estimates a monthly output of four or more high-quality contracts. Conversely, if the recruiter initially selects Plan A, I can infer that the recruiter’s estimated monthly output will be less than four net high-quality contracts per month or they are opposed to recruiter bonuses. . In the event the recruiter initially selects Plan A, the survey will ask a follow-up question that increases the initial bonus amount by \$50, for a total of \$100 per net

high-quality contract. Once again, the recruiter will have the option to either remain on the current recruiter SDAP, or switch to Plan B. The survey logic will persist if the recruiter continues to select Plan A, and it will stop once the recruiter rejects a bonus amount of \$300 per net high-quality contract. Once the recruiter rejects the \$300 bonus, the following question asks the recruiter to submit the bonus amount in which they would select Plan B. In doing so, the recruiter reveals their estimated output. Using rational economics, Table 1 illustrates a recruiter's estimated output:

Bonus Amount	Estimated Output (monthly net HQ contracts)
\$50	At least 4.00
\$100	At least 2.00
\$150	At least 1.33
\$200	At least 1.00
\$250	At least 0.80
\$300	At least 0.67

Table 1. Implied recruiter productivity

4. Section IV (Projected Productivity)

In this section, recruiters no longer have the option to remain on the current SDAP, \$450 per month. Rather, recruiters are given a scenario in which NRC has implemented a new SDAP, \$250 per month plus a certain bonus for each net high-quality contract, designed to increase recruiter productivity and decrease the cost of ineffective recruiters. Unlike Section III, this section directly solicits the recruiter to provide their

estimated output for a given bonus amount. The bonus amounts were: zero dollars (no bonus), \$100, \$150, \$200, \$250, \$300, \$500, and \$1000.

a. Section Update

In my initial version of the survey, this section asked the recruiter to estimate their output solely based on a monetary incentive. After receiving feedback from participants, I sensed many recruiters would rather have time off than a bonus. Therefore, I added two additional questions that asked recruiters to estimate their productivity if they were given two options: 1) half-day liberty for each net high-quality contract; or 2) full day liberty for each net high-quality contract. Most of the time recruiters are given time off during weekends, so to make these two options a true incentive I indicated that the days off work were to be taken between Monday and Friday, at their discretion. This update allows me to observe the effects of offering recruiters time off after meeting their monthly requirements.

5. Section V (Current SDAP Structure)

This section seeks to reveal whether the current SDAP provides a sense of output equity among recruiters.

The first question asks: considering the environment of recruiting duty, the Current SDAP 1) under compensates 2) correctly compensates 3) over compensates, recruiters. This question provides an opportunity for participants to express their level of satisfaction with the current SDAP. Moreover, responses may support policy recommendations for restructuring the current SDAP.

Next, the following question was only asked to those participants who selected under compensate recruiters. Using a Likert scale, participants indicated whether a larger SDAP would motivate recruiters by selecting the following: strongly disagree, disagree, neutral, agree, or strongly agree. The results may indicate whether an incentive motivates recruiters to write one more contract, monetary or nonmonetary.

The last question was asked to determine whether potential cost savings exist in paying recruiters according to their qualification, assuming the following:

- Total force of 3250 recruiters
- One-third of the recruiting force is basic qualified (1,073 recruiters)
- SDAP were reduced to \$250 per month for basic qualified recruiters
- Minimum time to qualify for advanced recruiter is 12 months

The following equation reveals potential annual cost-savings:

$$Savings = (Basic_qualified * SDAP * 12months)$$

$$Savings = (1,254 * \$250 * 12) \Rightarrow \$3,762,000$$

C. LIMITATIONS OF THE SURVEY

With a potential sample size of 3250 participants, after numerous attempts to contact each NRD, only 20 of 26 NRDs volunteered to participate in the survey. Additionally, of the 20 participating NRDs, only 306 enlisted recruiters completed the survey (a response rate of 15 percent). Therefore, the results could be affected by selection bias.

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IV. RESULTS

A. INTRODUCTION

The objective of this research is to determine which incentives motivate recruiters to be more productive. By analyzing survey responses, we can quantify the effects of non-monetary and monetary incentives to determine which incentives recruiters respond to, and whether current NRC incentives promote recruiters to be more productive.

B. NON-MONETARY ANALYSIS

1. Recruiters

Survey responses for non-monetary incentives were divided into three categories: Gold Wreath (GW), Other-individual awards (OIA), and Liberty. Participants, 306 enlisted recruiters, were asked to describe how current non-monetary incentives affect their motivation to attain one more high-quality contract by choosing one of the following descriptors: never, rarely, sometimes, often, or always. Their opinions will allow me to identify and compare incentive effects (see Figure 4).

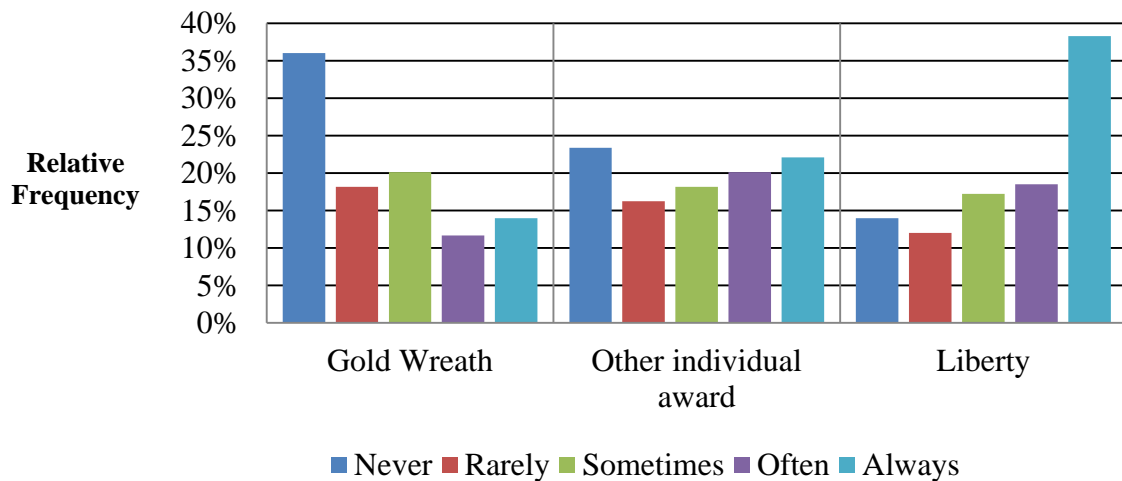


Figure 4. Effects of non-monetary incentives on recruiter productivity (recruiter)

Figure 4 indicates, the GW “never” motivates 36 percent, “rarely” motivates 18.2 percent, “sometimes” motivates 20.1 percent, “often” motivates 11.7 percent, and “always” motivates 14.0 percent of enlisted recruiters to attain one more high-quality contract. However, when making pair-wise comparisons, testing for the difference in means, amongst these categorical responses, only “never” and “always” are statistically significant at the five percent level. Several comments made by recruiters suggest that the GW may be more effective if it were awarded in a timely manner. To illustrate, many survey comments described an instance in which eligibility requirements for a GW were satisfied, but presentation of the award occurred several months later. This interval between eligibility and actual receipt of the award can work as a disincentive; therefore explaining why 36 percent of the participants were “never” motivated by the GW to attain one more additional high-quality contract.

Responses to OIA appear to have an even distribution; however, almost 25 percent of participants indicate the incentive “never” motivates them to attain an additional high-quality contract. However, when comparing “always” percentages between GW and OIA, 14 percent and 22.1 percent respectively, recruiters appear more likely to be motivated by OIA.

A final look shows that “Liberty” leads as the most influential non-monetary incentive. With 38.3 percent indicating the incentive “always” motivates them to attain one more high-quality contract. This percentage may represent the fact that recruiters come to recruiting duty, technically a shore duty, expecting to have sufficient liberty to recover from sea duty. When compared to other non-monetary incentives, survey comments suggest that recruiters would be more productive if awarded liberty.

2. Leadership

In the same manner as recruiters, NRD leadership, 309 participants, were asked to describe how current non-monetary incentives affect recruiter motivation to attain one more high-quality contract. Figure 5 graphically illustrates their responses.

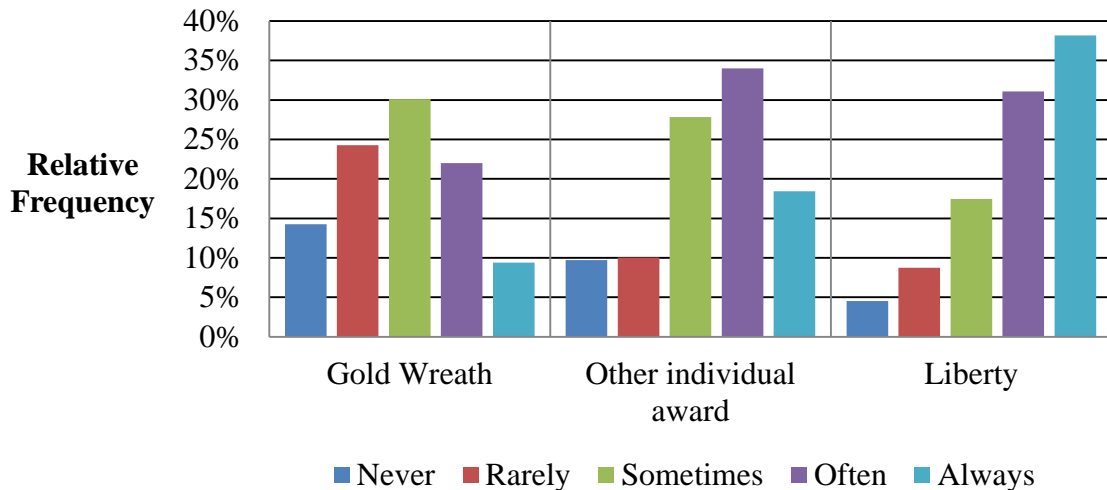


Figure 5. Effects of non-monetary incentives on recruiter productivity (leadership)

Figure 5 indicates, leadership believes the Gold Wreath (GW) “never” motivates 14.2 percent, “rarely” motivates 24.3 percent, “sometimes” motivates 30.1 percent, “often” motivates 11.7 percent, and “always” motivates 14.0 percent of enlisted recruiters to attain one more high-quality contract. What is interesting to note is that the shape of responses may indicate that leadership is undecided when determining the effects of the GW.

With respect to OIA, Figure 5 shows leadership making a positive shift towards the incentives motivating recruiters to write one more high-quality contract. In supporting this claim, we examine the percentage change among “sometimes,” “often,” and “always.” With a decrease of 2.3 percent “sometimes” facilitates the growths of “often” and “always” by 12 and 9.1 percent, respectively.

Finally, evidence shows that 38.2 percent, compared to OIA’s 18.5 percent, of leadership expects “Liberty” to motivate recruiters. This clear and conclusive evidence suggests that “Liberty” is the chief non-monetary incentive.

3. Comparing Recruiter and Leadership Perceptions of Non-monetary Incentives

To ensure recruiters are properly incentivized, leadership must understand what motivates their recruiters to produce more. The following figures illustrate the differences

in perception among recruiters and leadership. Two other categories, Station-level Awards and District-level Awards, were presented to participants; however, when testing for differences in responses, the differences were not statistically significant; the responses were not statistically significant; as a result the categories were not included in the graphs below.

Starting with Figure 6, we observe the largest difference occurs with the GW incentive. The results indicate that 36 percent of recruiters are “never” motivated by the incentive; whereas 14.2 percent of leadership is confident that recruiters are “never” motivated by the GW. This difference is significant and, when compared to recruiters, leadership tends to under estimate motivation for each incentive. Moreover, we observe an exponential decay as the incentive approaches “Liberty.”



Figure 6. “Never” comparison between recruiters and leadership

Next in Figure 7, negligible differences occur in incentive motivation. However, what can be observed is that leadership over estimates GW and under estimates OIA and Liberty.

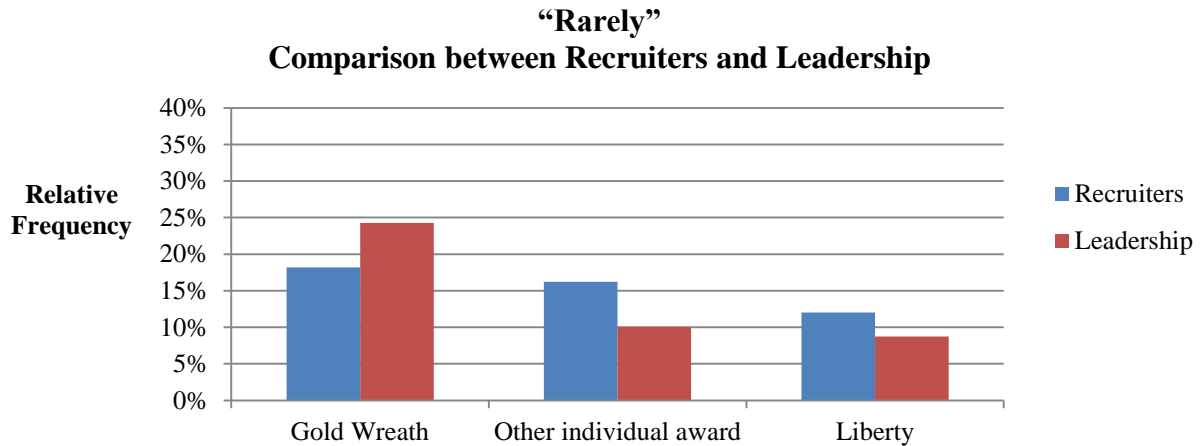


Figure 7. “Rarely” comparison between recruiters and leadership

Figure 8 illustrates that leadership overestimates the GW and OIA by 10 percent and 9.7 percent respectively, and is in alignment with recruiters regarding “Liberty.”

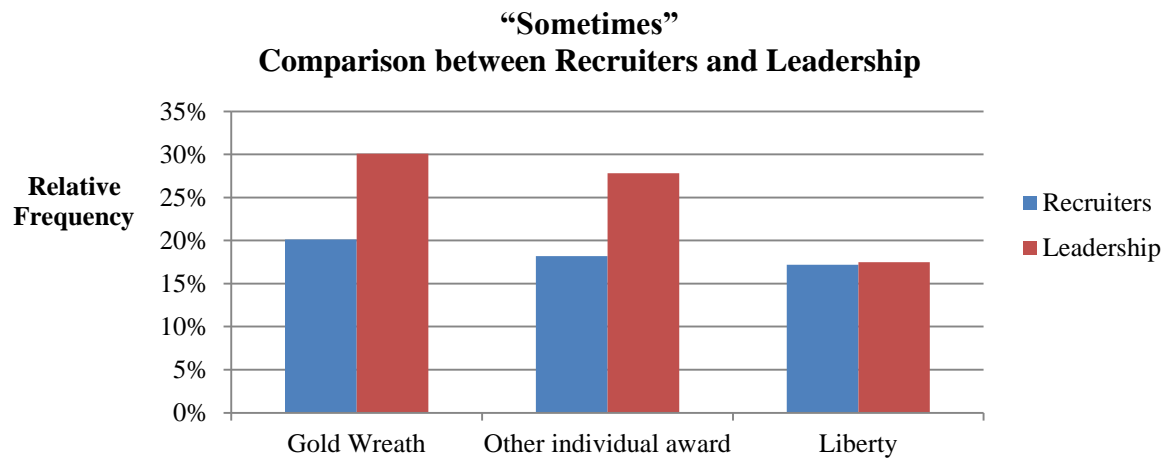


Figure 8. “Sometimes” comparison between recruiters and leadership

Figure 9 illustrates that leadership overestimates all category’s effect on recruiter motivation. However, in this figure, we observe the responses shifting from a downward to an upward shift.

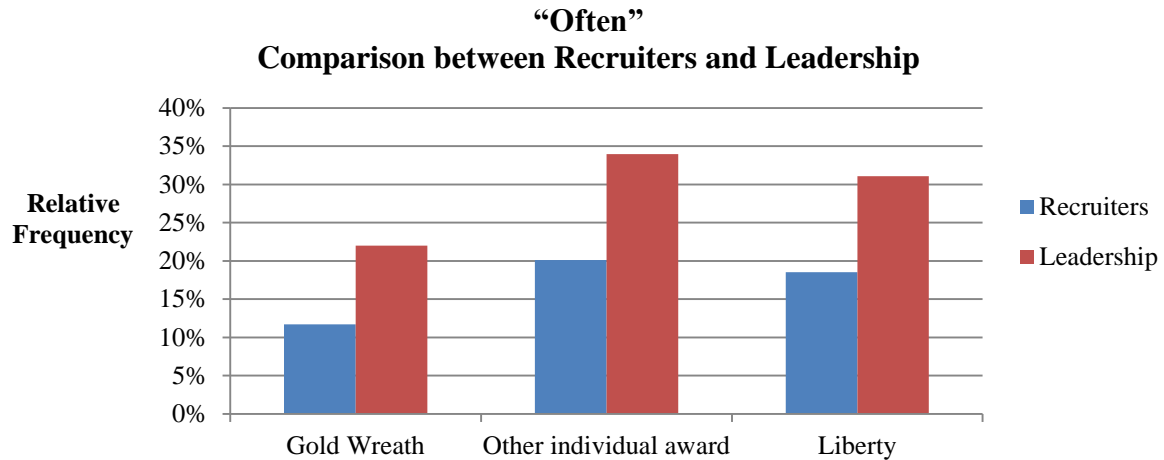


Figure 9. “Often” comparison between recruiters and leadership

Finally, Figure 10 displays exponential growth as the incentive approaches “Liberty.” Moreover, Figure 10 shows the highest percentage alignment among recruiters and leadership.

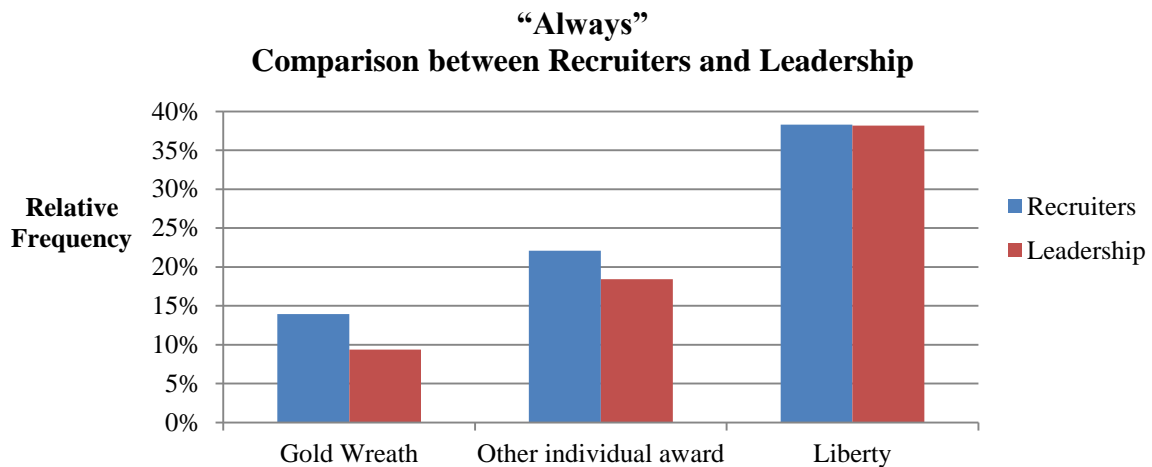


Figure 10. “Always” comparison between recruiters and leadership

C. MONETARY INCENTIVES

By providing a monetary incentive, I seek to understand the effect a bonus has on recruiter productivity. However, recruiters may have a tendency to exaggerate their

productivity if simply asked how productive they would be in certain situations, so I elicited recruiter's implied productivity based on their selected preferred plan.

Currently, recruiting duty offers one monetary incentive, Special Duty Assignment Pay (SDAP), which is offered to encourage sailors to volunteer for recruiting duty. Once qualified, recruiters receive SDAP, \$450 per month, in which expected productivity of one contract per month is implicit. However, in many instances, unproductive recruiters rarely have their SDAP suspended. Consequently, current SDAP policy does not allow us to observe the effect of monetary incentives on productivity. Therefore, through the use of scenarios, I will be able to observe the effects of monetary incentives would likely have on actual recruiter productivity.

1. Recruiter Scenario

In this scenario each recruiter must select one of the following SDAP plans:

- Plan A: Receive current SDAP of \$450 per month; or
- Plan B: Receive a \$250 SDAP plus a \$50 bonus per net high-quality contract

Selection of their preferred plan reveals their implied productivity per recruiter (PPR). For example, if the recruiter selects Plan B above, the expected minimum PPR would be four net high-quality contracts per month allowing them to return to \$450 per month. Conversely, if the recruiter selects Plan A above, the expected minimum PPR would be less than four net high-quality contracts per month. In order to reveal the implied PPR for those selecting Plan A, the scenario is designed to ask subsequent questions consisting of the same options; however, the bonus amount for Plan B would increase by \$50 up to a \$300 bonus amount.

In Table 2, we find that, in aggregate, 14.4 percent would take a \$50 bonus with an implied PPR of four, 45.4 percent would take a \$100 bonus with an implied PPR of two, 52 percent take a \$150 bonus with an implied PPR of 1.3, 64.7 percent would take a \$200 bonus with an implied PPR of one, 68.6 percent would take a \$250 bonus with an implied PPR of 0.8, and 79.7 percent of the recruiters would take a \$300 bonus with an

implied PPR of 0.67. Only 20.3 percent would either require the bonus to be greater than \$300 or would not accept a bonus to switch to Plan B.

Bonus	# of recruiters taking bonus	Cumulative percent	Implied HQ PPR
\$50	44	14.4%	4.00+
\$100	95	45.4%	2.00+
\$150	20	52.0%	1.33+
\$200	39	64.7%	1.00+
\$250	12	68.6%	0.80+
\$300	34	79.7%	0.67+

Table 2. Bonus scenario results

Based on scenario results, approximately 80 percent of recruiters would take a reasonable bonus amount. Furthermore, almost half of recruiters would take a \$100 bonus, with an implied PPR of two HQ contracts, indicating a recruiter bonus would likely increase overall productivity by a factor of two when compare to the national PPR. As a result, using a bonus simulation may assist in realizing this incentive's real potential.

D. BONUS SIMULATION

The purpose of the bonus simulation is to reveal which bonus amounts would have a minimum benefit-cost ratio of 1:1. The following factors were considered in the simulation: the bonus amount, proportion taking each bonus, average PPR of non-bonus takers, number of recruiters choosing the bonus, number of recruiters not choosing the bonus, expected contract for bonus takers, expected contract for non-bonus takers, and expected total number of high-quality contract. To ensure conservative estimates, the following assumptions were made:

- NRC annual high-quality requirement of 33,480 contracts
- A recruiting force of 3250 required to attain annual requirements
- Recruiters are not demand-constrained and can attain their estimated number of contracts
- No geographic constraints with a reduction of force

After running the simulation, results indicate that \$50 and \$100 bonus amounts would meet the requirements to reduce the force and meet annual requirements. Therefore, I will use these amounts to conduct a benefit-cost analysis.

E. BONUS BENEFIT-COST ANALYSIS

The purpose of this benefit-cost analysis is to determine the potential cost savings associated with reducing the recruiting force and providing bonuses to recruiters. As mentioned in the previous section, bonus amounts of \$50 and \$100 provide the requisite force and number of contracts to meet annual requirements. Additionally, assumptions used in the previous section were applied to the analysis. In Table 3, results indicate that for a bonus amount of \$50 the Navy would be able to reduce its recruiting force by 704 recruiters. The benefit of this force reduction would be \$54.7 million and the cost would be \$1.7 million, resulting in a benefit-cost ratio of 32 to 1. Furthermore, for a bonus amount of \$100 the Navy would be able to reduce its recruiting force by 527 recruiters. The benefit of this force reduction would be \$41.0 million and the cost would be \$3.4 million, resulting in a benefit-cost ratio of 12 to 1.

Bonus	Force	Reduction	Benefit	Cost	Ratio
\$50	2546	704	\$54.7M	\$1.7M	32:1
\$100	2723	527	\$41.0M	\$3.4M	12:1

Table 3. Benefit-cost analysis

To calculate the annual benefit of each bonus amount I used the following equation:

$$Benefit = (Reduction * Average_Salary) + (Reduction * Annual_SDAP)$$

To determine average salary, I estimated the average enlisted recruiter to be an E-5 with six years of service. Therefore, using this estimate, the average enlisted recruiter's annual salary is \$72,177 (this total combines pay and all benefits). For annual SDAP, I assumed that, on average, recruiters become eligible for SDAP after 90 days onboard,

and when distributed over the average 36-month tour the recruiter is eligible for SDAP 11 out of 12 months annually. Therefore, I multiplied the number of months eligible by \$450, for a total of \$4950.

To calculate the annual cost of each bonus amount I used the following equation:

$$Cost = (Bonus_amount * Required_Annual_high_quality_contracts)$$

As determined by the simulation, the bonus amounts are \$50 in \$100. However, the 33,480 required annual high-quality contracts were assumed in the previous section.

Although the analysis reveals significant benefit-cost ratios, my analysis would be inadequate if I did not address the potential issues associated with a recruiter bonus. The following section will discuss adverse effects associated with giving recruiters a bonus.

F. ADVERSE EFFECTS OF A BONUS

To avoid similar oversights made by the Army, identifying major issues associated with recruiter bonuses is essential. In this section, I will discuss three major adverse effects of implementing a bonus 1) increased potential for fraud 2) degradation of unit cohesion, and 3) reinforcement of societal stigma.

1. Increased Potential for Fraud

Fraud occurs when opportunity and lack of oversight coexist. On the subject of recruiting, fraud may be the product a recruiter's sense of being disproportionately compensated for their time and efforts. Therefore, to mitigate the risk of potential fraud, policy must limit opportunities and enhance incentive oversight.

2. Degradation of Unit Cohesion

Normally, within an NRS, genteel competition is a favorable incentive to promote recruiter productivity. Despite this competition, recruiters understand that teamwork is paramount in achieving the overall mission. Therefore, implementation of a bonus incentive may degrade NRS cohesion by sanctioning recruiters to shift their efforts from assisting fellow recruiters to attaining additional contracts for money.

3. Reinforcement of Societal Stigma

Through the optics of our society, perhaps as the result of indiscretions, military recruiters remain to be seen as “used-car salesman.” Consequently, prospective applicants remain skeptical of recruiter intentions. Therefore, implementation of a per-contract bonus may exacerbate skepticism; thereby recruiters may become less productive due to the amount of time spent featuring the opportunities associated with enlisting.

Due to these adverse effects, it may be worthwhile to consider other incentives. In the following section, I consider liberty an alternative incentive to a bonus.

G. BONUS ALTERNATIVE

Liberty may be the most cost effective means of encouraging recruiter productivity. Therefore, in response to the adverse effects of a bonus, I will consider liberty as a possible alternative.

To elicit the effects of liberty on recruiter productivity, I asked recruiters how productive they would be with no bonus and no days off, with half-day liberty, and full-day liberty for each net high-quality contract. Note this was under a set of questions on assuming SDAP was reduced to \$250. Figure 11 illustrates the effects of liberty on monthly recruiter productivity.

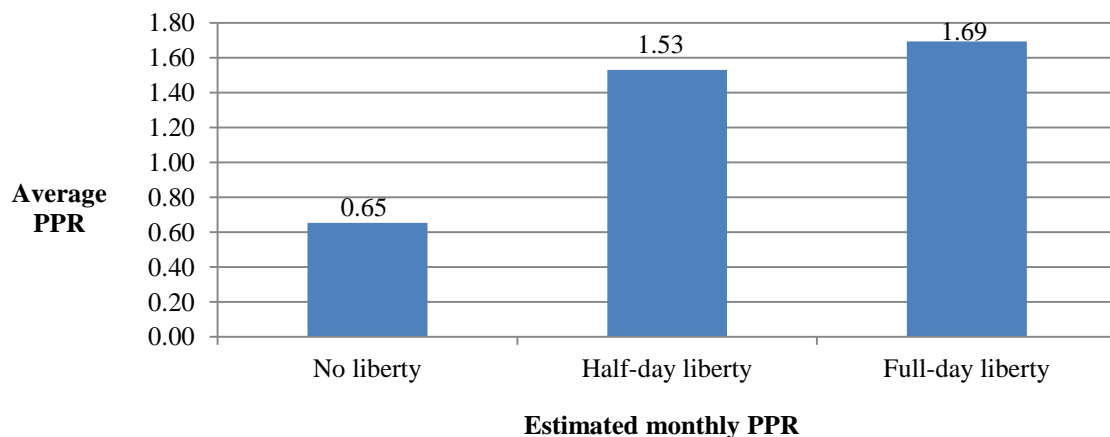


Figure 11. Effects of liberty on recruiter productivity

1. No bonus/No liberty

Figure 11 shows that with no bonus and no liberty the average expected productivity would be 0.65. Considering the question presented a reduced SDAP of \$250, this average is only slightly below the current national average of 0.85.

2. Half-day Liberty

The half-day liberty incentive appears to have the greatest marginal effect on recruiter productivity. The average expected productivity would be 1.53, which is more than double that of no liberty.

3. Full-day Liberty

Although an increase in productivity is observed, with an average of 1.69, the marginal effect between half-day liberty and full-day liberty is negligible.

V. CONCLUSIONS

A. OVERVIEW

In essence, the primary objective of this research was to identify the types of incentives that motivate recruiters to produce more contracts. Through the administration of an incentives survey, Navy recruiters were given the opportunity to express their opinions on current incentives and provide understanding on the potential effects of implementing a per-contract-bonus.

B. DISCUSSION

1. Back of the Envelope Calculations

After conducting a benefit-cost analysis, results indicate two bonus amounts would pay for themselves, \$50 and \$100. A \$50 bonus yields a benefit of \$54.7 million and a cost of \$1.7 million for a benefit-cost ratio of 32 to 1. Moreover, a \$50 bonus has an implied productivity of four or more contracts per month for those who would take the bonus along with a reduced SDAP. Additionally, a \$100 bonus yields a benefit component of \$41 million and a cost component of \$3.3 million for a benefit-cost ratio of 12 to 1. A \$100 bonus has an implied productivity of two or more contracts per month for those who would take the bonus.

2. Optimal Bonus Amount

Of all the bonus amounts offered, only the \$50 and \$100 bonuses could pay for themselves, with each bonus yielding a benefit-cost ratio of 32 to 1 and 12 to 1, respectively.

Although the implied PPR of a \$50 bonus for bonus-takers, four net high-quality contracts per month, is twice that of the implied PPR of a \$100 bonus, only 14 percent of recruiters would prefer the \$50 bonus amount. In comparison, nearly 50 percent of recruiters would prefer the \$100 bonus. Moreover, the bonus generates an implied PPR, two high-quality contracts per month, which is two and a half times greater than the average national PPR.

3. Issues with the Analysis

Due to the use of scenarios to extrapolate recruiter productivity, recruiters may exaggerate their estimates based on the bonus amount. Furthermore, scenarios may be seen as having no potential for implementation (i.e., \$500 bonus per contract); therefore recruiter may have an incentive to overstate their productivity.

4. Bonus Drawbacks

Although results reveal favorable benefit-cost ratios, the following drawbacks compromise the successful implementation of a per-contract bonus: increase in fraud, degradation of unit cohesion, and reinforcement of “used-car salesman” stigma.

C. RECOMMENDATIONS

Based on the survey results, I recommend the following:

1. Investigate Bonus Potential

Investigate methods to mitigate the potential for fraud and the other bonus drawbacks to increase the likelihood that this cost-saving incentive could be implemented.

2. Field a “Liberty” Experiment

Implementation of an official Liberty policy could be done at no additional monetary cost. Therefore, conducting this experiment would provide an opportunity to gather empirical evidence of Liberty’s effect on recruiter productivity to assist in the development of incentive policy.

APPENDIX A. INITIAL SURVEY QUESTIONS

Recruiter Incentive Survey

Thank you for taking the time to complete this survey! This survey is designed to help our team better understand how monetary and non-monetary incentives affect a recruiter's motivation to attain their monthly goal (productivity). Additionally, we would like to identify individual-level attitudes and perceptions of current incentives and productivity levels. Keep in mind, your opinion may assist in the development of new Navy Recruiting Command incentive policies.

Your responses will be assigned a random ID and all responses will remain completely anonymous. There is no individual benefit or compensation for your participation, although results will be used to enhance our research. This survey should take between 5-10 minutes to complete.

If you have questions or comments about the research please contact LT Luis Ortiz at lnortiz@nps.edu, Dr. Jeremy Arkes at jaarkes@nps.edu, or Dr. Jesse Cunha at jcunha@nps.edu. If you have any questions regarding your rights as a research subject, please contact the Naval Postgraduate School Internal Review Board Chairman, Dr. Lawrence G. Shattuck at lgshattu@nps.edu, 831-656-2473.

Participation Consent

Your participation is voluntary. If you choose to participate, you are free to stop the survey anytime without penalty. Your responses to the survey will be used responsibly and protected from release to persons not part of the research; however, as with all data collected from any research, there is a minor risk that data could be mismanaged. Responses collected will be stored securely on password protected computers at the Naval Postgraduate School.

Do you wish to volunteer for this survey?

- a. Yes
- b. No

Section 1 (General Information)

1. Which category below best describes your current position:
 - a. Enlisted recruiter
 - b. Officer recruiter
 - c. Leading Petty Officer
 - d. Leading Chief Petty Officer
 - e. Division Leading Chief Petty Officer
 - f. Head Quarters Management
 - g. None of the above

2. Which of the following best describes your current recruiter qualification:
 - a. Basic
 - b. Advanced
 - c. Unqualified
3. Did you volunteer for recruiting duty?
 - a. Yes
 - b. No
4. Were you given a choice about where you would be stationed?
 - a. Yes
 - b. No
5. Did you receive your desired NRD (that is, the wide-geographic area)?
 - a. Yes
 - b. No
6. Were you assigned to your desired recruiting station within the NRD?
 - a. Yes
 - b. No
7. How many months have you been on recruiting duty?
8. What is your best guess for how many contracts you have written in the last [3,6,12 depends on participants number of months on recruiting duty] months?
9. Assuming your production was limited by Navy Recruiting Command (NRC) quality standards, how many contracts could you have written in the last [3,6,12 depends on participants number of months on recruiting duty] if you were NOT restricted in how many contracts you could have written?
10. Approximately, what percentage of your contracts have been high-quality (AFQT \geq 50)?
11. Are you a career recruiter?
 - a. Yes
 - b. No

Section 2 (Non-Monetary Incentives)

Please provide your opinion on command awards and their impact on recruiter productivity.

- 1.) How often do the following awards motivate you (replace “you” with “recruiters” if question #1 not equal to “enlisted recruiter”) to obtain more than one contract per month?

	Never	Rarely	Sometimes	Often	Almost always
a. Gold Wreath					
b. Special Liberty					
c. Other Individual Awards					
d. Station-Level Awards					
e. District-Level Awards					

- 2.) How often do the following awards cause you (replace “you” with “recruiters” if question #1 not equal to “enlisted recruiter”) to shift your efforts from recruiting high-quality (AFQT \geq 50) to low-quality (AFQT $<$ 50) recruits?

	Never	Rarely	Sometimes	Often	Almost always
a. Gold Wreath					
b. Special Liberty					
c. Other Individual Awards					
d. Station-Level Awards					
e. District-Level Awards					

Section 3 (Bonus Scenario)

*** Please note the following key term: Net high-quality contract - is a monthly contract written by a recruiter in which the new enlistee achieves an AFQT score greater than or equal to 50, minus any attrites taken in the same month the contract was written. ***

Suppose the plans described below were the only two Special Duty Assignment Pay (SDAP) plans available to recruiter, and each recruiter must make a one-time selection of their preferred plan.

- Plan A: Receive the current recruiter SDAP of \$450 per month, or
- Plan B: Receive an SDAP of \$250 plus a certain bonus for each net high-quality contract written.

- 1.) Which Plan would you prefer if the bonus amount were \$50?
 - a. Plan A - Receive your current SDAP of \$450 per month.
 - b. Plan B - Receive an SDAP of \$250 per month plus a bonus per NET high-quality contract

- 2.) Would you prefer Plan B if the “bonus” were \$100 per net high-quality contract?
 - a. Yes
 - b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #2.

- 3.) Would you prefer option B if the “bonus” were \$150 per net high-quality contract?
 - a. Yes
 - b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #3.

- 4.) Would you prefer option B if the “bonus” were \$200 per net high-quality contract?
 - a. Yes
 - b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #4.

- 5.) Would you prefer option B if the “bonus” were \$250 per net high-quality contract?
 - a. Yes
 - b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #5.

- 6.) Would you prefer option B if the “bonus” were \$300 per net high-quality contract?
 - a. Yes
 - b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #6.

- 7.) Enter the minimum amount it would take for you to select Plan B.

Once the recruiter enters the amount the survey will proceed to a productivity question.

Section 4 (Estimated Productivity)

*** Please note the following key term: Net high-quality contract - a monthly contract written by a recruiter in which the new enlistee achieves an AFQT score greater than or equal to 50, minus any attrites taken in the same month the contract was written. ***

Now imagine Plan B, from the previous question, has replaced the current SDAP (\$450/month). ***Plan B - Receive an SDAP of \$250 per month plus a certain bonus for each net high-quality contract.***

Assuming you will remain “on production” for the next 12 months, please estimate the total number of net high-quality contracts you would realistically write in that 12 month period, if you were not limited in how many you could write, for the following bonus amounts: *** Please keep in mind that we are looking for the “net total” number of contracts you estimate to write in this 12 month period for each bonus amount ***

Bonus per high-quality contract	Total estimated number of contracts per year
\$0	
\$100	
\$150	
\$200	
\$250	
\$300	
\$500	
\$1000	

Section 5 (Current SDAP)

- 1.) Considering the environment of recruiting duty, the current SDAP:
 - a. Undercompensates recruiters
 - b. Correctly Compensates recruiters
 - c. Overcompensates recruiters
- 2.) A larger SDAP would motivate recruiters to write more contracts.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
- 3.) A “basic” qualified recruiter should receive a lower SDAP than an “advanced” qualified recruiter.

- a. Strongly Disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly Agree

APPENDIX B. REVISED SURVEY QUESTIONS

Revision in red font

Thank you for taking the time to complete this survey! This survey is designed to help our team better understand how monetary and non-monetary incentives affect a recruiter's motivation to attain their monthly goal (productivity). Additionally, we would like to identify individual-level attitudes and perceptions of current incentives and productivity levels. Keep in mind, your opinion may assist in the development of new Navy Recruiting Command incentive policies.

Your responses will be assigned a random ID and all responses will remain completely anonymous.

There is no individual benefit or compensation for your participation, although results will be used to enhance our research.

This survey should take between 5-10 minutes to complete.

If you have questions or comments about the research please contact LT Luis Ortiz at lnortiz@nps.edu, Dr. Jeremy Arkes at jaarkes@nps.edu, or Dr. Jesse Cunha at jcunha@nps.edu. If you have any questions regarding your rights as a research subject, please contact the Naval Postgraduate School Internal Review Board Chairman, Dr. Lawrence G. Shattuck at lgshattu@nps.edu, 831-656-2473.

Participation Consent

Your participation is voluntary. If you choose to participate, you are free to stop the survey anytime without penalty. Your responses to the survey will be used responsibly and protected from release to persons not part of the research; however, as with all data collected from any research, there is a minor risk that data could be mismanaged. Responses collected will be stored securely on password protected computers at the Naval Postgraduate School.

Do you wish to volunteer for this survey?

- c. Yes
- d. No

Section 1 (General Information)

1. Which category below best describes your current position:
 - a. Enlisted Recruiter

- b. Officer Recruiter
 - c. Leading Petty Officer
 - d. Leading Chief Petty Officer
 - e. Division Leading Chief Petty Officer
 - f. Head Quarters Management
 - g. None of the above
2. Which of the following best describes your current recruiter qualification:
 - a. Basic
 - b. Advanced
 - c. Unqualified
 3. Did you volunteer for recruiting duty?
 - a. Yes
 - b. No
 4. Were you given a choice about where you would be stationed?
 - a. Yes
 - b. No
 5. Did you receive your desired NRD (that is, the wide-geographic area)?
 - a. Yes
 - b. No
 6. Were you assigned to your desired recruiting station within the NRD?
 - a. Yes
 - b. No
 7. How many months have you been on recruiting duty?
 8. What is your best guess for how many contracts you have written in the last [3,6,12 depends on participants number of months on recruiting duty] months?
 9. Assuming your production was limited by Navy Recruiting Command (NRC) quality standards, how many contracts could you have written in the last [3,6,12 depends on participants number of months on recruiting duty] if you were NOT restricted in how many contracts you could have written?
 10. Approximately, what percentage of your contracts have been high-quality (AFQT \geq 50)?
 11. Are you a career recruiter?
 - a. Yes
 - b. No

Section 2 (Non-Monetary Incentives)

Please provide your opinion on Command awards and their impact on recruiter productivity.

- 1.) How often do the following awards motivate you (replace “you” with “recruiters” if question #1 not equal to “enlisted recruiter”) to obtain more than one contract per month?

	Never	Rarely	Sometimes	Often	Almost always
a. Gold Wreath					
b. Special Liberty					
c. Other Individual Awards					
d. Station-Level Awards					
e. District-Level Awards					

- 2.) How often do the following awards cause you (replace “you” with “recruiters” if question #1 not equal to “enlisted recruiter”) to shift your efforts from recruiting high-quality (AFQT \geq 50) to low-quality (AFQT $<$ 50) recruits?

	Never	Rarely	Sometimes	Often	Almost always
a. Gold Wreath					
b. Special Liberty					
c. Other Individual Awards					
d. Station-Level Awards					
e. District-Level Awards					

Section 3 (Bonus Scenario)

*** Please note the following key term: Net high-quality contract - is a monthly contract written by a recruiter in which the new enlistee achieves an AFQT score greater than or equal to 50, minus any attrites taken in the same month the contract was written. ***

Suppose the plans described below were the only two Special Duty Assignment Pay (SDAP) plans available to recruiter, and each recruiter must make a one-time selection of their preferred plan.

Plan A: Receive the current recruiter SDAP of \$450 per month, or

Plan B: Receive an SDAP of \$250 plus a certain bonus for each net high-quality contract written.

3.) Which Plan would you prefer if the bonus amount were \$50?

- a. Plan A - Receive your current SDAP of \$450 per month.
- b. Plan B - Receive an SDAP of \$250 per month plus a bonus per NET high-quality contract

4.) Would you prefer Plan B if the “bonus” were \$100 per net high-quality contract?

- a. Yes
- b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #2.

5.) Would you prefer option B if the “bonus” were \$150 per net high-quality contract?

- a. Yes
- b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #3.

6.) Would you prefer option B if the “bonus” were \$200 per net high-quality contract?

- a. Yes
- b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #4.

7.) Would you prefer option B if the “bonus” were \$250 per net high-quality contract?

- a. Yes
- b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #5.

8.) Would you prefer option B if the “bonus” were \$300 per net high-quality contract?

- a. Yes
- b. No

If the recruiter’s answer is “Yes” then the survey will proceed to a productivity question, if their answer is “No” then proceed to question #6.

9.) Enter the minimum amount it would take for you to select Plan B.

\$ per contract

Once the recruiter enters the amount the survey will proceed to a productivity question.

Section 4 (Estimated Productivity)

*** Please note the following key term: Net high-quality contract - a monthly contract written by a recruiter in which the new enlistee achieves an AFQT score greater than or equal to 50, minus any attrites taken in the same month the contract was written. ***

Now imagine Plan B, from the previous question, has replaced the current SDAP (\$450/month).

Plan B - Receive an SDAP of \$250 per month plus a certain bonus for each net high-quality contract.

Assuming you will remain "on production" for the next 12 months, please estimate the total number of net high-quality contracts you would realistically write in that 12 month period, if you were not limited in how many you could write, for the following bonus amounts:

*** Please keep in mind that we are looking for the "net total" number of contracts you estimate to write in this 12 month period for each bonus amount ***

1)

Bonus per high-quality contract	Total estimated number of contracts per year
\$0	
\$100	
\$150	
\$200	
\$250	
\$300	
\$500	
\$1000	

2) How many net high-quality contracts would you expect to write in that 12 month period, provided you are not limited in how many you could write, if you received half a day off (Mon-Fri) instead of a bonus for each net high-quality contract?

3) How many net high-quality contracts would you expect to write in that 12 month period, provided you are not limited in how many you could write, if you received a full day off (Mon-Fri) instead of a bonus for each net high-quality contract?

Section 5 (Current SDAP)

1.) Considering the environment of recruiting duty, the current SDAP:

- d. Undercompensates recruiters
- e. Correctly Compensates recruiters
- f. Overcompensates recruiters

2.) A larger SDAP would motivate recruiters to write more contracts.

- f. Strongly Disagree
- g. Disagree
- h. Neutral
- i. Agree
- j. Strongly Agree

3.) A "basic" qualified recruiter should receive a lower SDAP than an "advanced" qualified recruiter.

- f. Strongly Disagree
- g. Disagree
- h. Neutral
- i. Agree

Strongly Agree

LIST OF REFERENCES

- Arkes, J. (2013). Do recruiters “make mission, go fishin?” An analysis of when recruiter productivity can be improved. Monterey, CA: Naval Postgraduate School.
- Arkes, J., & Cunha, J. (2014). Workplace goals and output quality: Evidence from time-constrained recruiting goals in the U.S. Navy. Monterey, CA: Naval Postgraduate School.
- Arkes, J., & Mehay, S. (2013). Recruiter productivity: A review of selected research. Monterey, CA: Naval Postgraduate School.
- Navy Personnel Command. (2011, November 22). Navy announces updated special duty assignment pay rates. Retrieved January 21, 2014, from <http://www.public.navy.mil/bupers-npc/organization/npc/publicaffairs/news/Pages/2011/NavyannouncesupdatedSpecialDutyAssignmentPayRates.aspx>.
- Navy Personnel Command. (2011, May 17). *Navy recruiting manual-enlisted* (Vol. I) Millington, TN: Navy Personnel Command.
- Commander, Navy Recruiting Command. (2013, August 13). *1650.1B Navy recruiting command awards manual*. Retrieved February 24, 2014, from http://www.cnrc.navy.mil/publications/1650_1B.htm.
- Farrell, B. (2008). *Military personnel: evaluation methods linked to anticipated outcomes needed to inform decisions on Army recruitment incentives*. Washington, DC: Government Accountability Office.
- Samuelson, D. L., Kraus, A., Reese, D. L., & Moskowitz, M. J. (2006). Productivity effects of changes in the size of the enlisted recruiter force. Alexandria: Center of Navy Analysis.

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